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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,946	09/04/2003	Tong Xie	10030187-1	7020
57299 7590 02/02/2007 AVAGO TECHNOLOGIES, LTD. P.O. BOX 1920 DENVER, CO 80201-1920			EXAMINER SHERMAN, STEPHEN G	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 02/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/655,946	Applicant(s) XIE ET AL.	
	Examiner Stephen G. Sherman	Art Unit 2629	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 15 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_  
Claim(s) objected to: \_\_\_\_\_  
Claim(s) rejected: \_\_\_\_\_  
Claim(s) withdrawn from consideration: \_\_\_\_\_

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

*Amr A. Awad*

Continuation of 11. does NOT place the application in condition for allowance because: On page 9 of the remarks, the applicant argues the rejection of claims 1-2, 11 and 20 under 35 USC 102(b) as being anticipated by Liou (US 5,086,197). The applicant's first argument is that claims 1, 11 and 20 require that the displacement be obtained along two axes from two images, and that this could not be accomplished by comparing any two "images" in Liou because there are different detectors for the different axes, however, the applicant even states in the specification on page 9, lines 17-20 that the detector of the present invention could be an array, and thus, the array taught by Liou can provide an image from multiple detectors, and if the applicant means that multiple detectors in an array can not make up a single image and infact make multiple images then the applicant is admitting 112 issues with the present application. The applicant's second argument is that claim 1 requires an integral optical motion detection circuit, however, the claim never states this limitation. The claims says "apparatus for optical navigation." Just because a circuit that detects motion is outside of the pen/mouse type device does not mean that it is not a part of the "apparatus." Also, the fact that the circuit is external does not mean that it is not an integral part of the apparatus. The applicant's third argument is that claims 1 and 11 require that images are aquired at a specified rate and that Liou does not teach this limitation. The examiner respectfully disagrees. The word "frequency" is a synonym for the word "rate." Therefore, given the claim language that the "rate" is "specified," all this really means is that the images are captured based on some kind of operating frequency. For example, the applicant states on page 9, lines 20-21 of the specification that their device works at a rate of 2,000 images per second, i.e. 2 kHz. Even if the device of Liou is working at 100 MHz, and Liou would be working on some kind of operating frequency otherwise the device would not work, the device is still operating at a frequency, i.e. specified rate. Just because the device of Liou might take measurements of the photodiodes faster than the applicant does, and the examiner is not admitting that Liou operates faster, Liou is still working at a specified rate. Furthermore, the applicant states on page 9, lines 18-19 that their detector could be a photodiode, and therefore if the applicant says that Liou cannot run at a specified rate or else the device would not work, then the applicant is admitting that their own device would not work at a specified rate. The applicant's fourth argument is that the apparatus taught by Liou would simply not function without an integral source, however, the claim does not define what meaning the word integral has for this purpose. The examiner understands in this case that the word could mean that the light source is inside of the pen and thus 10' is NOT inside of the pen and therefore is not integrally located in the pen device. The applicant then argues on the bottom of page 10 that the examiner has not pointed to any teaching of Liou that the apparatus shifts one of the "images" relative to another of the "images" followed by the computation of a correlation value between the shifted image and the unshifted image, however, the examiner explained his interpretation in the final rejection and thus the reference does teach this limitation when taken broadly. On page 11 the applicant argues the rejection of claim 4 saying that the combination does not make a prima facie case for obviousness, however, the examiner points out that there is not a limitation in the claim defining what is meant by a supplemental light source, therefore the examiner could take the limitation to mean that since Liou has an option of which light device to use, 10 or 10' then when one is chosen despite the other, it is used to supplement the one not used and Lauffenburger is used to teach of adusting the power of the light source such that accuracy of the optical navigation can be provided and thus an prima facie case of obviousness has been made. The applicant is reminded that the claims are read in their "broadest reasonable interpretation" and that limitations from the specification cannot be read into the claims in order to avoid the prior art. The applicant's next argument is with respect to claims 8 and 16, where the applicant states that the examiner has not pointed to any suggestion in the art that would cause someone of ordinary skill to combine the teachings of Liou and Mumford, however, the applicant is reminded that the suggestion to combine does not need to come from the reference, but rather only what the references would have suggested to "one of ordinary skill" in the art. The applicant's argument on page 13 is with respect to claims 6 and 14. The applicant first states that they disagree with the examiner and that there is no teaching in Minn of detecting the shadow mask, however, as explained in the rejection the examiner believes he does teach this limitation. Furthermore the applicant argues that the examiner has not pointed to any reason that one would want to use the apparatus of Liou on the surface of a cathode ray tube and then sites case law stating that the examiner must point to teaching or suggestion within the references however, the examiner will once again point out that it is not necessary that the references actually suggest, expressly or in so many words, the changes or improvements that the applicant has made. The test for combining references is what the references as a whole would have suggested to one of ordinary skill in the art. In re Sheckler, 168 USPQ 716 (CCPA 1971); In re McLaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 725 (CCPA 1968).